

REMARKS

Claims 1-36 are all the claims pending in the application.

The abstract of the disclosure is objected to.

Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph.

Claims 1, 13, 20, and 31 are allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office Action.

Claims 2-12, 14-19, 21-30, 32-36 are allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims.

The Applicants traverse the rejections and request reconsideration.

Formal Matters

The Examiner is requested to acknowledge the receipt of the formal drawings filed on October 20, 2005.

Section 112 rejections

The Applicants amend the claims to overcome most of the grounds for their rejection under section 112.

Regarding the objections to the allegedly relative terms, the Applicants respectfully submit that a skilled artisan in this field of technology will know the metes and bounds of the invention from the description provided in the Specification and what is commonly known in the art. It should be noted that specific numerical limits are not necessary. The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim

indefinite under 35 U.S.C. 112, second paragraph. MPEP 2173.05 citing Seattle Box Co., v. Industrial Crating & Packing, Inc., 731 F.2d 818, 221 USPQ 568 (Fed. Cir. 1984). Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.

“Very low speed” is a spaced region where an induction voltage cannot be detected, including a zero speed. This is described on page 2, lines 18-20 of the originally filed specification. Since the induction voltage is proportional to the speed, the induction voltage is at an undetectable level and becomes zero when the speed is very low and reaches to zero.

Second, a “high speed” is a region where an output of an inverter 102 shown in Fig. 1 is in a state of voltage saturation. In other words, it is the region where the induction voltage is equal to or more than a voltage of a maximum voltage of the inverter subtracted by a harmonic voltage. The harmonic voltage cannot be superposed when a voltage saturation occurs to the output of the inverter, thus becomes uncontrollable (page 7, lines 15-18 of the originally filed specification).

Consequently, “low speed” can be uniquely defined as a region between the “very low speed” and the “high speed”.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Patent Application No.: 10/509,957

Attorney Docket No.: Q83999

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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